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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,938	02/23/2007	Chunyan Song	EX04-037C-US	7049
63572 7590 03/25/2008 MCDONNELL BOEHNEN HUIBERT @ BERGHOFF LLP 300 SOUTH WACKER DRIVE SUITE 3100 CHICAGO, IL 60606				
EXAMINER CARLSON, KAREN C				
ART UNIT		PAPER NUMBER		
1656				
MAIL DATE		DELIVERY MODE		
03/25/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/556,938

**Applicant(s)**

SONG ET AL.

**Examiner**

Karen Cochrane Carlson, Ph.D.

**Art Unit**

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

The claims have been written using improper Markush language. For example, in Claim 1 (and 20), reference is made to both protein and DNA. In Claim 16, reference is made to cells and to animals. In Claims 14 and 21, no antecedent basis for animal is found in the independent claim for animal. Therefore, the restriction divides the claims into inventions as set forth below.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 4-7, 11, and 12, drawn to a method for identifying PTEN/IGF pathway modulating agents via RANBP2, classified in class 435, subclass 7.1.
- II. Claims 1-3, 6, 8-12, 16, and 17, drawn to a method for identifying PTEN/IGF pathway modulating agents via nucleic acid encoding RANBP2 further comprising a secondary assay system comprising cultured cells, classified in class 435, subclass 6.
- III. Claims 1-3, 6, 8-12, 16, 18, and 19, drawn to a method for identifying PTEN/IGF pathway modulating agents via nucleic acid encoding RANBP2 further comprising a secondary assay system comprising animals, classified in class 435, subclass 6.
- IV. Claims 13 and 15, drawn a method of modulating PTEN/IGF pathway comprising contacting a cell with a modulator, classified in class 435, subclass 7.1.
- V. Claims 14, drawn a method of modulating PTEN/IGF pathway comprising administering to an animal a modulator, classified in class 514, subclass 2.
- VI. Claims 20 and 22, drawn to a method of modulating PTEN/IGF pathway in a cell by contacting the cell with an agent that binds RANBP2, classified in class 435, subclass 7.1.

- VIII. Claim 21, drawn to a method of modulating PTEN/IGF pathway in a cell by administering to an animal an agent that binds RANBP2, classified in class 514, subclass 2.
- IX. Claim 21, drawn to a method of modulating PTEN/IGF pathway in a cell by administering to an animal an agent that binds nucleic acid encoding RANBP2, classified in class 514, subclass 44.
- X. Claims 23-25, drawn to a method for diagnosing disease, classified in class 435, subclass 6.

The inventions are distinct, each from the other because of the following reasons:

The methods of Inventions I-X require different products and steps and have different endpoints. Therefore, Inventions I-X are patentably distinct.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Cochrane Carlson, Ph.D. whose telephone number is 571-272-0946. The examiner can normally be reached on 7:00 AM - 4:00 PM, off alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Kathleen Kerr Bragdon can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karen Cochrane Carlson, Ph.D./  
Primary Examiner, Art Unit 1656